

FIX-N-FAX #71

CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION

Number 71

Mandatory Compliance

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Boomer Chain/Tow Chain for Engine Companies (Grade and Description)

STANDARD:

Minimum standard is Domestic Mfg. 3/8" X 22', Grade 70 with grab hooks if used only for towing.

If chain is to be used in conjunction with power rescue equipment or lifting during rescue operations, then the minimum standard is Domestic Mfg. Grade 80.

Grab hook design strength or load rating shall equal or exceed rating of chain.

WARNING:

Boomer chain/tow chains that have been stretched or damaged, or links that have been welded on, should be replaced.

Do not mix standards for towing with the standards for securing or lifting; each operation has its special requirements.

GRADE AND DESCRIPTION:

American made chain is the highest quality available. Consider what your chain needs are and determine the size, grade and length best to do the job.

<u>GRADE & DESCRIPTION</u>	<u>TRADE NAME</u>	<u>SIZE</u>	<u>SAFE WORKING LOAD</u>	<u>BREAKING STRENGTH</u>	<u>WEIGHT PER FT.</u>
Grade 30 - A general purpose low carbon steel chain that is most commonly used in car towing chain assemblies. Also referred to as Proof Coil chain. Not for overhead lifting.	PCC Proof Coil	5/16" 3/8"	1,900 2,650	7,600 10,000	1 1.5

Grade 40 - High test chain is made of carbon steel, which has high tensile strength and excellent wear and abrasive resistance. Commonly used in medium and heavy duty tow chain and safety assemblies as well as binding chains. Not for overhead lifting.	HTC High Test	5/16"	3,900	15,600	1.25
		3/8"	5,400	21,600	1.5
		1/2	9,200	36,800	3
		5/8"	11,500	46,000	4
Grade 70 - Transport chain is made from Boron treated Steel which provides a high strength to weight ratio. Originally designed load binding, transport chain is also superior for towing and safety chains. Not for overhead lifting.	TSP Trans- port	5/16"	4,700	18,800	1.25
		3/8"	6,600	26,400	1.75
		1/2	11,300	45,200	2.75
		5/8"	17,100	68,600	3.75
Grade 80 - Alloy chain is the strongest available and is the only chain approved for overhead lifting. It combines high working load strengths with minimum weight. The best for towing, recovery and safety chains.	ALC Alloy	5/16"	5,100	20,000	1
		3/8"	7,300	29,200	1.5
		1/2	13,000	52,000	2.5
		5/8"	20,000	81,000	3.5

Safe working load limit:

This is the maximum load in pounds that chain should be used in service. All chain has a 4 to 1 safe working load limit.

Minimum breaking strength:

This is the actual point which the chain has been pulled to the point of breaking (under the most ideal conditions). You should not use the breaking strength as a guide to chain usage. Use safe working load limit as your guide.

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